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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/020,015

12/14/2001

Francois Pachet

450117-03595

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07/28/2006

C. IRVIN MCCLELLAND  
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

LEROUX, ETIENNE PIERRE

ART UNIT

PAPER NUMBER

2161

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/020,015

Applicant(s)

PACHET, FRANCOIS

Examiner

Etienne P LeRoux

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 7, 10-26, 28-34 and 38-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7, 10-26, 28-34, 38-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

*Claims Status*

Claims 1, 2, 7, 10-26, 28-34, 38-57 are pending: claims 3-6, 8, 9, 27, 35-37 and 58-60 have been canceled. Claims 1, 2, 7, 10-26, 28-34, 38-57 are rejected as detailed below.

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 7, 10-13, 33, 34 and 38-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's Admitted Prior Art (hereafter AAPA).

Claims 1, 2, 7, 10-13, 33, 34 and 38-42:

AAPA discloses:

first input means for receiving a sequence comprising an audio data stream of music titles in which an initial or rational link is considered to exist between at least some pairs of adjacent items

segmentation means for extracting segmentation data indicating end limits of said music titles from a website associated to a source of said audio data stream for receiving said segmentation data through second input means separate from the audio data stream, and for recovering music titles from said audio data stream in response to said segmentation data and means for storing said recovered music titles [paragraph 64]

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1, 2, 7, 10-13, 33, 34 and 38-42 are rejected under 35 U.S.C. 102(e) as being anticipated by US Pat No 6,607,136 issued to Atsmon et al (hereafter Atsmon).

Claims 1, 2, 7, 10-13, 33, 34 and 38-42:

Atsmon discloses:

first input means for receiving a sequence comprising an audio data stream of music titles in which an initial or rational link is considered to exist between at least some pairs of adjacent items

segmentation means for extracting segmentation data indicating end limits of said music titles from a website associated to a source of said audio data stream for receiving said segmentation data through second input means separate from the audio data stream, and for recovering music titles from said audio data stream in response to said segmentation data and means for storing said recovered music titles [Fig 1, Detailed Description Text, section 341<sup>1</sup>]

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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<sup>1</sup> See Appendix 1

Art Unit: 2161

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14, 20, 21, 24-26, 28, 30-32, 43, 48, 49, 52, 53, 54, 55 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atsmon in view of US Pat No 6,088,455 issued to Logan et al (hereafter Logan).

Claims 14 and 43:

Atsmon discloses the elements of claims 1 and 33 as noted above but does not disclose similarity analyzing means for producing automatically similarity relations between stored segments in terms of their closeness in said sequence of stored segments. Logan discloses similarity analyzing means for producing automatically similarity relations between stored segments in terms of their closeness in said sequence of stored segments [Fig 4, col 12, lines 35-42]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Atsmon to include similarity analyzing means for producing automatically similarity relations between stored segments in terms of their closeness in said sequence of stored segments as taught by Logan for the purpose of obtaining music that matches the user's desired piece of music.

Claims 20 and 48:

The combination of Atsmon and Logan discloses the elements of claims 1 and 33 as noted above and furthermore, Logan discloses wherein said apparatus further comprises music program generating means for building a sequence of information items from said stored segments [col 2, lines 24-38].

Claims 21 and 49:

The combination of Atsmon and Logan discloses the elements of claims 1, 20, 33 and 48 as noted above and furthermore, Logan discloses wherein said program generating apparatus is operative to build said sequence of information items in response to user tastes expressed through user inputs [col 2, lines 24-38].

Claims 24 and 52:

The combination of Atsmon and Logan discloses the elements of claims 1, 20 and 22 as noted above, and furthermore, Logan discloses wherein said program generating means (48, 50) is further responsive to said similarity relations to create a sequence of information items in which information items close to disliked information items are de-emphasized and/or in which information items close to liked information items are emphasized [col 2, lines 30-38].

Claim 25:

The combination of Atsmon and Logan discloses the elements of claims 1 and 20 as noted above and furthermore, Logan discloses wherein said program generating means is responsive to a selected attribute of said information items, said selected attribute being entered through corresponding user input, to create a sequence of information items containing at least a preponderance of information items falling under said selected attribute [paragraph 18, saving by attribute 102]

Claim 26 and 54:

The combination of Atsmon and Logan discloses the elements of claims 1, 20 and 25/33, 48, 49 and 53 as noted above and furthermore, Logan discloses wherein said program generating means is further responsive to a discovery parameter entered through a user input, said

Art Unit: 2161

discovery parameter indicating a degree of closeness of said sequence to said selected attribute [col 10, lines 10-20].

Claim 28 and 55:

The combination of Atsmon and Logan discloses the elements of claims 1, 20, 25 and 26 as noted above and furthermore, Logan discloses wherein said program generating means is further responsive to said similarity relations between the stored segments in terms of their closeness in said sequence of stored segments, such that said information items do not fall under said selected attribute and are entered in said created sequence when said information items have a predetermined degree of closeness, as determined by said similarity relations, with an adjacent information item of said sequence [col 2, lines 25-38]

Claim 32:

The combination of Atsmon and Logan discloses the elements of claims 1 and 20 as noted above and furthermore, Logan discloses apparatus for producing at least one taste, said taste being a user taste comprised of a sequence of information items produced by taking account feedback from said user, or a generic taste comprised of a sequence [abstract].

Claim 53:

The combination of Atsmon and Logan discloses the elements of claims 33, 48 and 49 as noted above and furthermore, Logan discloses wherein said program generating step is carried out to take account of a selected attribute (e.g. type of music) of said information items, said selected attribute being entered through a corresponding user input, to create a sequence of

Art Unit: 2161

information items containing at least a preponderance of information items falling under said selected attribute [col 12, lines 1-13].

Claims 30 and 57:

The combination of Atsmon and Logan discloses the elements of claims 1, 20 29, 33, 48, 49, and 56 as noted above and furthermore, Logan discloses means for importing said created sequences [col 3, lines 30-42].

Claim 31:

The combination of Atsmon and Logan discloses the elements of claims 1, 20 and 29 as noted above and furthermore, Logan discloses playback means for receiving said segments of a selected created sequence and expressing the data contained therein in a form intelligible to a user (e.g. music, images, etc.) [Fig 1, 20].

Claims 15-19, 22, 44-47 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atsmon and further in view of US Pat No 6,225,546 issued to Kraft et al (hereafter Kraft).

Claims 15 and 44:

Atsmon discloses the elements of claims 1, 14, 33 and 43 as noted above but does not disclose wherein said similarity analyzing means produces said similarity relations by producing, for each segment corresponding to an information item considered in a given stored sequence, a similarity relation graph expressing a distance  $D$  between that information item and other stored information items. Kraft discloses wherein said similarity analyzing means produces said similarity relations by producing, for each segment corresponding to an information item



Art Unit: 2161

considered in a given stored sequence, a similarity relation graph expressing a distance D between that information item and other stored information items as taught by Kraft [Fig 5]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Atsmon to include wherein said similarity analyzing means produces said similarity relations by producing, for each segment corresponding to an information item considered in a given stored sequence, a similarity relation graph expressing a distance D between that information item and other stored information items as taught by Kraft. The ordinarily skilled artisan would have been motivated to modify Atsmon per the above for the purpose of generating a thumbnail of an audio segment so that the audio segment can be recognized [Kraft, col 2, lines 15-25]

Claims 16 and 45:

The combination of Atsmon and Kraft discloses the elements of claims 1, 14, 15, 33, 43 and 44 as noted above and furthermore, Kraft discloses wherein said similarity relation graph contains, for each said other information item, a closeness value determined between pairs formed by said information item considered and said other information item [Fig 5].

Claims 17 and 46:

The combination of Atsmon and Kraft discloses the elements of claims 1, 14, 33, 43 and 44 as noted above and furthermore, Kraft discloses wherein said analyzing means is arranged to calculate said closeness value for said information item considered by attributing a first closeness value each time said other information item appears just before or just after in said sequence, said first values being cumulated over said sequence to yield a cumulated value indicating the closeness of said pair of information items [Fig 5]. It would have been obvious to one of

Art Unit: 2161

ordinary skill in the art at the time the invention was made to modify Atsmon to include wherein said analyzing means is arranged to calculate said closeness value for said information item considered by attributing a first closeness value each time said other information item appears just before or just after in said sequence, said first values being cumulated over said sequence to yield a cumulated value indicating the closeness of said pair of information items as taught by Kraft. The ordinarily skilled artisan would have been motivated to modify Atsmon per the above for the purpose of efficiently summarizing a musical composition [Kraft, col 1, line 60 – col 2, line 6].

Claims 18 and 47:

The combination of Atsmon and Kraft discloses the elements of claims 1, 14, 17, 33, 43, 44 and 46 as noted above and furthermore, Kraft discloses a method of generating audio summaries of musical pieces by means of composite hierarchical structures [abstract, Fig 5]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Logan and Buil to include wherein said analyzing means is further arranged to attribute a second closeness value, smaller than said first closeness value, each time said other information item is separated from said information considered by separating information items, where  $m$  is an upper bounded number, said first and second values being cumulated over said sequence to yield a cumulated value indicating the closeness said pair of information items. The ordinarily skilled artisan would have been motivated to modify the combination of Logan and Buil per the above for the purpose of creating a brief summary of the common theme of the composition so that a listener can recognize it [Kraft, col 2, lines 7-11].

Claim 19:

Art Unit: 2161

The combination of Atsmon and Kraft discloses the elements of claims 1, 14, 17 and 18 as noted above and furthermore, Kraft discloses wherein said number *m* of separating information items is equal to one [Fig 5].

Claims 22 and 50:

Atsmon discloses the elements of claims 1, 20, 33, and 48 as noted above, however, the Atsmon fails to disclose wherein said program generating apparatus is operative to build said sequence of information items in response to said similarity relations according to any one of claims 14 to 19, in which information items are concatenated taking their closeness into account. Kraft discloses wherein said program generating apparatus is operative to build said sequence of information items in response to said similarity relations according to any one of claims 14 to 19, in which information items are concatenated taking their closeness into account [Fig 5]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Atsmon to include wherein said program generating apparatus is operative to build said sequence of information items in response to said similarity relations according to any one of claims 14 to 19, in which information items are concatenated taking their closeness into account as taught by Kraft. The ordinarily skilled artisan would have been motivated to modify Atsmon per the above for the purpose of creating a summarization hierarchy [Kraft, col 10, lines 20-25]

Claims 23 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atsmon in view of US Pat No 6,558,015 issued to Eyer et al (hereafter Eyer).

Claims 23 and 51:

Atsmon discloses the elements of claims 1, 20, 21, 33, 48 and 49 as noted above, however, Atsmon fails to disclose wherein said program generating means is responsive to a user input expressing a like or dislike, associated to at least some information items in said succession of information items, to create a sequence of information items in which said disliked information items tend to be removed and liked information items are emphasized. Eyer discloses wherein said program generating means is responsive to a user input expressing a like or dislike, associated to at least some information items in said succession of information items, to create a sequence of information items in which said disliked information items tend to be removed and liked information items are emphasized [col 8, lines 32-44]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Atsmon to include wherein said program generating means is responsive to a user input expressing a like or dislike, associated to at least some information items in said succession of information items, to create a sequence of information items in which said disliked information items tend to be removed and liked information items are emphasized as taught by Eyer. The ordinarily skilled artisan would have been motivated to modify Atsmon per the above for the purpose customizing digital audio received from a radio station [Eyer, col 8, lines 32-44]

Claims 29 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atsmon in view of US Pat No 6,083,009 issued to Kim et al (hereafter Kim).

Claims 29 and 56:

Atsmon discloses the elements of claims 1, 20, 33, 48, and 49 as noted above, but does not disclose wherein said program generating means comprises means for labeling and storing

Art Unit: 2161

said created sequences as objects which can be selectively exported outside said apparatus. Kim discloses wherein said program generating means comprises means for labeling and storing said created sequences as objects which can be selectively exported outside said apparatus [Fig 4, step 109,col 5, lines 45-62]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Atsmon to include wherein said program generating means comprises means for labeling and storing said created sequences as objects which can be selectively exported outside said apparatus as taught by Kim. The ordinarily skilled artisan would have been motivated to modify Atsmon per the above for the purpose of making the music list available at a remote site.

### *Response to Arguments*

Applicant's arguments submitted on 6/20/2006 have been carefully considered but are moot based on above new grounds of rejection necessitated by applicant's amending of the claims.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 2161

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

*Contact Information*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne P. LeRoux whose telephone number is (571) 272-4022. The examiner can normally be reached Monday through Friday between 8:00 am and 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Etienne LeRoux

7/25/06



Primary Examiner

*Appendix 1*

*US Pat No 6,607,136 issued to Atsmon et al*

*Detailed Description Text (341)*

Detailed Description Text (341):

In another example, the user may record a sound clip from some music that he heard over the radio. Although the user is unsure of the music's identity, he knows that he "likes" it. He accesses some central music website where he plays his sound clip. The pattern recognition software identifies the music and provides for the user the various CDs and other music forms (e.g., MP3) that are available for purchase. Thus, without knowing the title or artist of the music that he just heard on the radio, the user is able to identify and purchase that piece of music by merely recording a sound clip from that music and playing it back to a central website. This is especially useful because in most cases, the radio station rarely identifies the title (or even the artist) of a piece of music prior to actually playing that piece of music over the air. Usually, this identification occurs after the music is played. Sometimes, the radio disc jockey identifies this music along with several other songs that have also aired, which complicates the identification process for the user. Not only does the user have to match the identification with the actual song he heard, but he may have to wait for quite some time before the radio disc jockey makes the on-air identification. With this embodiment of the present invention, the user merely records the a clip of the song and play it back to a central music website. The music website will identify the music immediately and also suggest CDs that contain that song to purchase.